ASSESSMENT OF COMMUNICATION AND INNER STATES OF PEOPLE WITH PROFOUND INTELLECTUAL AND MULTIPLE DISABILITIES (PIMD)

Peter Zentel, Teresa Sansour, Meike Engelhardt, Torsten Krämer
Overview

Financing: EU-Project supported by the Horizon 2020 program
Period: 01/2018 – 12/2020
Consortium: International & interdisciplinary
Trial: 6 test persons with PIMD
Objectives: Design and develop an ICT platform that enables persons with PIMD to use digital applications and services that:

- can enhance the quality of their life
- increase their ability to self-determination
- enrich their life
Target Group

People with profound intellectual and multiple disabilities (PIMD):

- Profound intellectual disability
- Adaptive behaviour clearly below average

In addition:

- Motor impairment
- Sensory impairment
- Medical problems (e.g. epilepsy)

Communication:

- Usually no verbal language
- Often on a pre-symbolic level
- Use of individual and unconventional behaviour signals

Extensive support needs & dependency
Concept of INSENSION Platform

Approach: Technology-supported responsive environment

- Assessment: Recognition of non-symbolic behaviour
  a) Questionnaire for proxies
     - General data
     - Communication development
     - Inner States (Mood, Pain, Pleasure & Displeasure/ Distress)
• Assessment: Recognition of non-symbolic behaviour
  
b) Recognition Technologies
  – Facial expressions
  – Gestures
  – Vocalizations
  – Physiological parameters
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  c) Annotation process
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• Assessment: Recognition of non-symbolic behaviour
• Detection of context
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• Forwarding potential need for action
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- Assessment: Recognition of non-symbolic behaviour
- Detection of context
- Forwarding potential need for action
- Use of assistive applications
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- Use of assistive applications
- Creation of online knowledge repository on PIMD
Thanks for your attention!

Question, comments, remarks...?

Contact Info:
Peter Zentel: zentel@ph-heidelberg.de
Teresa Sansour: sansour@ph-heidelberg.de
Meike Engelhardt: engelhardt@ph-heidelberg.de
Torsten Krämer: kraemer@ph-heidelberg.de